

REMARKS

The specification has been corrected to clarify the text and to correct a grammatical error. No new matter has been added.

5 Claims 1-6 remain in the application. Claim 1 has been amended to provide antecedent language for new claim 7. Claim 7 has been added. Claim 7 is supported by Figs. 1, 2D, and 3 of the present application. Claims 1-7 are active in the application.

 Claims 1-4 and 6 were rejected under 35 USC 103(a) as being unpatentable over US patent 6,470,103 to Watanabe. Claim 5 has been rejected as being obvious over
10 Watanabe in view of U.S. Patent 5,358,412 to Maurinus et al. These rejections are traversed.

 The present invention provides an improved method for mounting a camera to a wiring board such as a circuit board. In the present invention, the camera is mounted to a connector that is soldered to the wiring board. With this arrangement, the camera is never
15 exposed to the heat of soldering. Also, unlike prior methods for directly soldering the camera, machine-implemented reflow soldering can be used instead of manual soldering. Also, the mechanical alignment of the camera is improved over manual soldering methods.

 Significantly, claim 1 requires a *camera* mounted on the connector. By
20 comparison, Watanabe does not teach or suggest mounting a camera or any other image-capturing device on the wiring board. Watanabe only teaches an OEIC having optical devices for optical communication via waveguides. The optical devices of Watanabe do not comprise a camera, and cannot capture images. For this reason, Watanabe does not meet the limitation of claim 1 requiring a camera mounted on the connector.

25 Moreover, Watanabe cannot reasonably be modified to mount a camera on the connector 3. This is because Watanabe teaches that it is essential for the OEIC 11 to face towards the wiring board and waveguides. Specifically, Watanabe requires an OEIC 11 having an optical device array 12. The optical device array comprises laser diodes and photodetectors for communicating with other OEICs through waveguides 2. The
30 waveguides 2 are disposed within the wiring board. Consequently, the laser diodes and photodetectors must be disposed to face towards the waveguides 2 and the wiring board 1

(e.g. see col. 7 lines 10-20 of Watanabe). Substituting a camera or any other image-capturing device for the OEIC 11 of Watanabe would similarly require that the camera face towards the wiring board.

For a camera to be useful, it should face away from the opaque wiring board, and into free space. For example, Figs. 1, 2D and 3 show the camera 11 mounted or being mounted so as to face away from the wiring board 12. Watanabe does not teach or suggest this orientation for a camera or any other optical device. Watanabe cannot be modified to have the OEIC 11 face away from the wiring board because the optical device of Watanabe array must face towards the waveguides 2 disposed in the wiring board. Watanabe therefore teaches away from mounting a camera on the connector.

Accordingly, present claim 1 is distinct and patentable over Watanabe, and the rejection of claim 1 and its dependent claims based on Watanabe must be withdrawn. Additionally, claim 7 has been added. Claim 7 requires that the camera face away from the wiring board. As noted above, Watanabe does not suggest this type of configuration.

With regard to claim 6, Watanabe does not teach or suggest that the OEIC can be detachably mounted. Watanabe teaches that the OEIC is permanently fixed in the connector by adhesive 6 (see col. 6 lines 62-67, col. 10, lines 18-19, col. 13, lines 28-33, and col. 18, lines 5-8). An adhesive does not allow the OEIC to be detached from the connector, as required by claim 6. Nowhere does Watanabe teach or suggest that the OEIC is detachable from the connector. Also, Watanabe cannot reasonably be modified to have the OEIC detachably mounted because Watanabe requires very accurate and stable alignment that only a permanent adhesive can provide. The OEIC is movable within the connector of Watanabe (see col. 6, lines 41-52), and so, without adhesive, the OEIC cannot have the precise placement required.

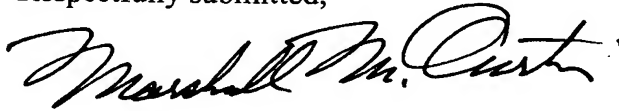
With particular respect to claim 5, Maurinus et al., like Watanabe, does not teach or suggest mounting a camera on the connector. Thus, Maurinus et al. does not make up for any of the deficiencies of Watanabe, and, accordingly, no conceivable combination of Watanabe and Maurinus et al. can render present claim 1 obvious, nor any of its dependent claims, including claim 5.

In view of the foregoing, it is respectfully requested that the application be reconsidered, that claims 1-7 be allowed, and that the application be passed to issue.

Should the Examiner find the application to be other than in condition for allowance, the Examiner is requested to contact the undersigned at the local telephone number listed below to discuss any other changes deemed necessary in a telephonic or personal interview.

5 A provisional petition is hereby made for any extension of time necessary for the continued pendency during the life of this application. Please charge any fees for such provisional petition and any deficiencies in fees and credit any overpayment of fees for the petition or for entry of this amendment to Attorney's Deposit Account No. 50-2041 (Whitham, Curtis & Christofferson P.C.).

10 Respectfully submitted,



15 Marshall M. Curtis
Reg. No. 33,138

20 Whitham, Curtis, & Christofferson, P.C.
11491 Sunset Hills Road, Suite 340
Reston, VA, 20190

Phone: 703-787-9400
Fax: 703-787-7557

25 Customer Number 30743